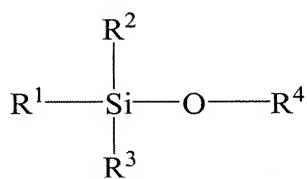


AMENDMENTS TO THE CLAIMS

Claim 1 (Currently Amended): A method for detecting and/or measuring the concentration of fluoride (F⁻) or hydrogen fluoride (HF) in a sample, comprising the following steps:

- contacting, in aqueous solution, said sample with a silylated organic compound in order to obtain a measurement solution, with said silylated organic compound being desilylated when it is in the presence of hydrofluoric acid or of fluoride, with the silylated organic compound and the desilylated organic compound being able to be detected and/or measured separately from each other; and
- detecting and/or measuring, in said measurement solution, the appearance of the desilylated organic compound, or the disappearance of the silylated organic compound, which takes place if fluoride or hydrogen fluoride is present in the sample,

wherein said silylated organic compound is:



in which R¹, R² and R³ are independently selected from C₁ to C₆ alkyls and R⁴ is said organic compound.

Claim 2 (Canceled):

Claim 3 (Original): The method as claimed in claim 2, in which R^1 , R^2 and R^3 are independently selected from the group consisting of methyl, ethyl, propyl and butyl.

Claim 4 (Previously Presented): The method as claimed in claim 1, in which the organic compound is a hydroxylated compound having a molecular weight of from 250 to 200,000 g.mol⁻¹.

Claim 5 (Previously Presented): The method as claimed in claim 1, in which the organic compound is a hydroxylated compound selected from the group consisting of estradiol, peptides, homovanillic acid, amphotericin, steroids, cytokines, arachidonic acid and derivatives thereof.

Claim 6 (Original): The method as claimed in claim 1, in which the detection and/or measurement, in said measurement solution, of the appearance of the desilylated organic compound, or of the disappearance of the silylated organic compound, is carried out by means of gas chromatography.

Claim 7 (Previously Presented): The method as claimed in claim 1, in which the detection and/or the measurement, in said measurement solution, of the appearance of the desilylated organic compound, or of the disappearance of the silylated organic compound, is carried out by means of an immunological test using one or more antibodies which is/are directed either against the unsilylated or desilylated organic compound or against the silylated organic compound.

Claim 8 (Original): The method as claimed in claim 7, in which the antibody(ies) is/are (a) monoclonal antibody(ies).

Claim 9 (Original): The method as claimed in claim 7, in which the immunological test is a competitive-type or non-competitive-type immunoassay.

Claim 10 (Previously Presented): The method as claimed in claim 1, in which the organic compound is estradiol or one of its derivatives.

Claim 11 (Previously Presented): The method as claimed in claim 1, in which the organic compound is selected from the group consisting of estra-1,3,5-triene-3,17 μ or 17 μ -diol, and their derivatives.

Claim 12 (Previously Presented): The method as claimed in claim 1, in which the silylated organic compound is used at a concentration of from 1 to 2000 ng/ml in the contacting step.

Claim 13 (Previously Presented): The method as claimed in claim 1, in which the aqueous solution is buffered to pH 4.5 to 5.5.

Claim 14 (Original): The method as claimed in claim 1, in which the contacting is effected at a temperature of from 54 to 64°C.

Claim 15 – 26 (Canceled):